

5546

DIAMOND DRILLING REPORT

on the

MM 5 FR. and M 17 Mineral Claims

MAGGIE MINE AREA

CACHE CREEK, B.C.

KAMLOOPS MINING DIVISION

92 I/14W

LATITUDE $50^{\circ} 55.4'N$ LONGITUDE $121^{\circ} 25.2'W$.

N.T.S. SHEET No. 92 I/14W

BETHLEHEM COPPER CORPORATION
Suite 2100 Guinness Tower
1055 West Hastings Street
Vancouver, B.C.
V6E 2H8

August 8, 1975

R. E. Anderson, P.Eng.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

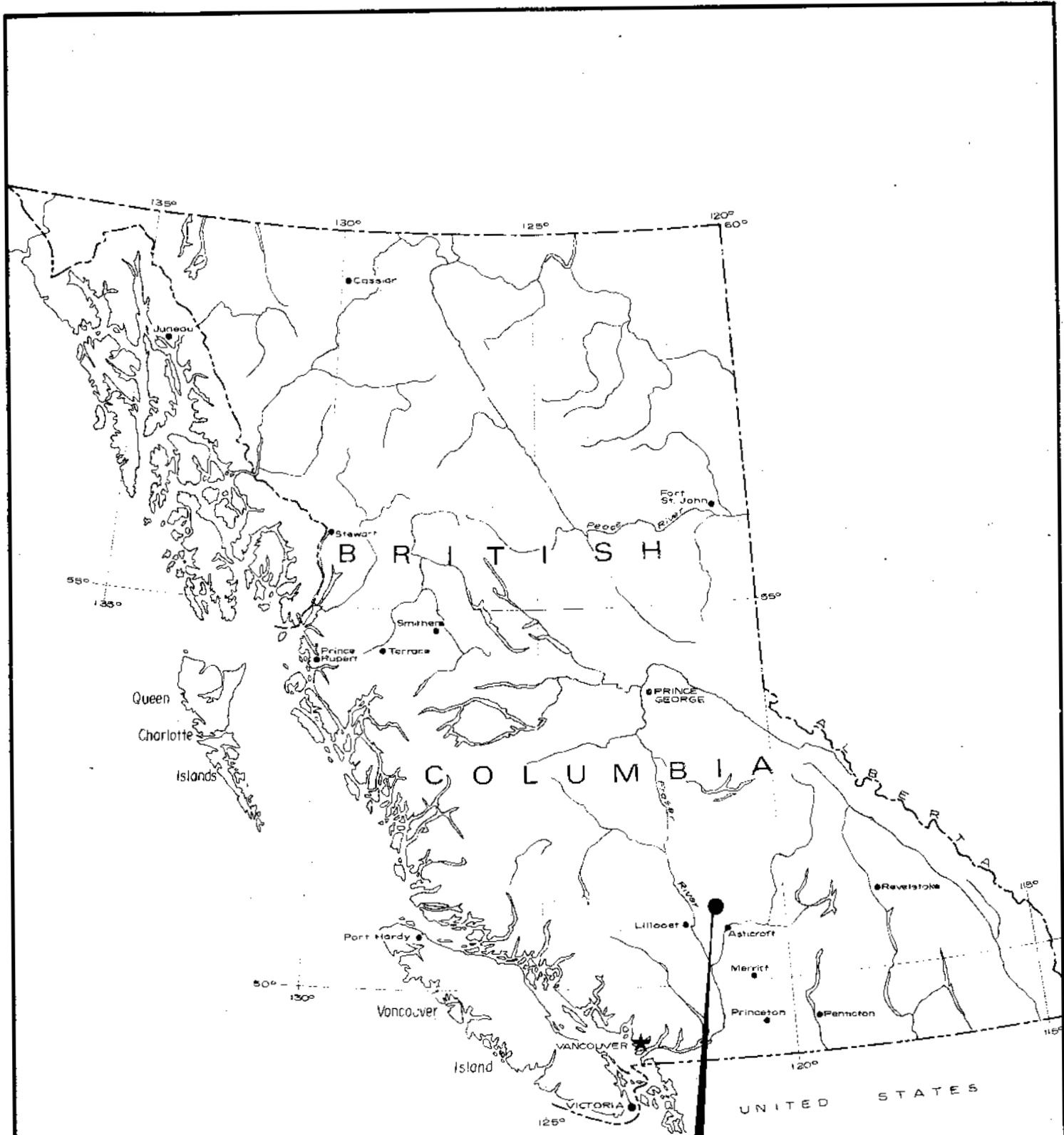
NO. 5546 MAP.....

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PROPERTY

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 5546 MAP 1

MAGGIE MINE PROJECT
 LOCATION PLAN

SECTION A - SUMMARY OF WORK

Introduction -

The Maggie porphyry copper-molybdenum deposit was discovered in 1970 by percussion and diamond drilling methods and the indicated geologic reserves resulting from this program are set at 181,440,000 tonnes grading 0.28% Cu and 0.029% Mo.

The deposit is located from 600 to 1800 metres S 20° E of the old Maggie adit and shaft, where underground exploration was carried out on a number of occasions between 1907 and 1930. Limited surface drilling was also conducted in this area in 1952 but the results were negative.

In view of the fact that all previous exploration drilling in the area of the old workings had been of a relatively shallow nature, it was felt that deep drilling would be the most satisfactory method to thoroughly test for any possible northward extensions to the main zone.

Location and Access -

The Maggie deposit is centered in the Bonaparte River valley some 15 Km. N 27° W of the Village of Cache Creek. The geographic co-ordinates are 50° 55.4' Latitude and 121° 25.2' Longitude with the N.T.S. sheet designation being 92 I/14W. Access from Cache Creek is via Highway 97 to the junction with Highway 12, a distance of 10.5 Km., thence 0.6 Km. west on Highway 12 to the point where it crosses the old Cariboo Highway and thence 4.5 Km. north on the old Cariboo Highway. (See Drawing No. 75-1.)

Topography and Physical Environment -

The main zone lies on the floor of the Bonaparte River valley, a major valley trending NNW from the Thompson River valley at Ashcroft. The elevation in the area of the deposit is 520 metres A.S.L. To the west, moderately sloped valley walls rise to a height of 1300 metres A.S.L. While to the east, the valley is flanked by steep rocky slopes which moderate rapidly toward the east and gradually rise to heights between 1500 and 1675 metres A.S.L.

Forest cover is comprised of stands of Cottonwood trees paralleling the Bonaparte River, with moderately spaced Ponderosa Pine and Douglas Fir located on the slopes of the valley.

Vegetation consists of various grasses in the forested areas with sagebrush and scrub cactus appearing on open slopes on the lower elevations.

Diamond Drilling -

Shepherd Enterprises Ltd. of Vancouver and Kamloops was the firm selected to carry out the drilling. They utilized a Longyear Model 44 diamond drilling unit employing the wire line core recovery method with an NQ size core barrel. The overall core recovery was excellent with the average for both holes being in the 90 - 95% range.

Drilling commenced on Hole No. MM-75-42 on May 9, 1975. This hole was spotted near the old Maggie shaft at the drill grid co-ordinates 136 N by 104 E. (See Drawing No. 75-4.) The hole was initially planned to be drilled to a depth of 152 metres (500') with the casing being left in the ground to facilitate deepening if so desired. This initial section was completed on May 17, 1975 and while Hole MM-75-43 was in progress it was decided to carry both probes to the 300 metre depth. Thus, MM-75-42 was deepened during the period from May 28 to June 4 with the final depth being 305.1 metres (1001').

305.1
305.1
610.5

Hole No. MM-75-43 was sited some 291 metres (955') west of the previous hole at drill grid co-ordinates 140 N by 96 E and was commenced on May 20 and completed on May 27, 1975. Final depth was 305.4 metres (1002').

The core from the drilling program was split and logged at Bethlehem's core storage facilities located at its Highland Valley operations. Detailed geological logs were prepared by D. C. Miller and R. J. Nethery, P.Eng., both of whom are on the staff of Bethlehem's exploration dept. Copies of the logs are appended in Section D.

Survey Control -

All drill holes that are completed in the area of the Maggie deposit are tied into the company's survey grid system that was established in 1970. This grid was initially established for the mineral claim surveys that were carried out and subsequently all drilling has since been tied into this network. Elevations were established from a series of Geodetic Bench Marks that are set at various locations in the Bonaparte River valley. All the survey work was contracted out to the land survey firm of McWilliam, Whyte, Goble and Associates.

Drilling Results -

The assays obtained from the drill cores are all listed in the geologic logs appended in Section D. All samples were assayed for copper and molybdenum values with selected sections being analyzed for gold, silver and zinc. The values obtained were all negative.

Summary of Costs -

Total costs incurred for the program were \$31,134.38 of which 82.38% or \$25649.13 represents expenditures for contractor's services and 17.62% or \$5485.25 represents expenditures incurred within the Bethlehem organization. The overall average cost of the drilling was \$51.00/metre or \$15.54/foot. The detailed summary of all the costs incurred is appended in Section B, along with copies of all contractor's invoices.

Respectfully submitted,



R. E. Anderson, P.Eng.
Exploration Manager

SECTION B - STATEMENT OF EXPENDITURES

Contractors (see accompanying invoices)

1. Robert Conley Contracting - front end loader used for site preparation and drill moving.	Total	\$459.00	
	Cost per hole	\$229.50	
2. McWilliam, Whyte, Goble and Assoc. - land surveyors utilized for the survey control.	Total	\$375.00	
	Cost per hole	\$187.50	
3. Shepherd Enterprises Ltd. - diamond drilling			
May 1 - 15, 1975		\$ 4,443.53	
May 15 - 31, 1975		16,213.90	
June 1 - 12, 1975		4,157.70	
	Total	\$24,815.13	
	Total footage	2003	
∴ Cost per foot		\$12.388	
Cost for MM-75-42 (1001')	=	\$12,401.37	
Cost for MM-75-43 (1002')	=	\$12,413.76	
∴ Contractor Cost for MM-75-42	=	\$12,818.37	
∴ Contractor Cost for MM-75-43	=	\$12,830.76	
	Total	=	\$25,649.13

Bethlehem Expenditures

1. Assaying - MM-75-42 -	96 Cu @ 2.00	=	\$ 192.00
	96 Mo @ 3.25	=	312.00
	46 Ag @ 2.25	=	103.50
	6 Au @ 4.25	=	25.50
			<hr/>
			633.00
	MM-75-43 -		
	70 Cu @ 2.00	=	140.00
	70 Mo @ 3.25	=	227.50
	1 Au @ 2.25	=	2.25
	1 Zn @ 2.50	=	2.50
			<hr/>
			372.25
			<hr/>
	Total		\$1,005.25

2. Personnel

R. E. Anderson, P.Eng. - Exploration Manager		
- a total of 7 days during the period from		
May 8, 1975 to June 6, 1975		
7 days @ \$140.00/day	=	\$ 980.00
E. Andersen - Property Agent		
- 4 days during the period from		
May 8, 1975 to June 6, 1975		
3 days - July 21 - 23		
7 days @ \$75.00/day	=	525.00
D. C. Miller, P.Eng. - Senior Geologist		
- 2 days - June 2 and 13, 1975		
2 days @ \$120.00/day	=	240.00
R. J. Nethery, P.Eng. - Project Geologist		
- 2 days - May 14 and 15, 1975		
2 days @ \$95.00/day	=	190.00
J. G. Collins - Field Supervisor		
- 18 days during the period from		
May 8 to June 3, 1975		
18 days @ \$65.00/day	=	1,170.00
P. Wannop - Field Assistant		
- 15 days during the period from		
May 8 - 31, 1975		
15 days @ \$45.00/day	=	675.00
N. Shaw - Secretary		
- 8 days during the period from		
May 8 - July 23, 1975		
8 days @ \$35.00/day	=	280.00

TOTAL \$4,060.00

3. Transportation

D. C. Miller - 1 Ford F-100 4 x 4 Pickup	=	
2 days @ \$15.00/day		\$ 30.00
R. J. Nethery - 1 Ford F-100 4 x 4 Pickup	=	
2 days @ \$15.00/day		30.00
J. G. Collins - 1 Ford F-250 4 x 4 Pickup	=	
18 days @ \$20.00/day		360.00
		<hr/>
Total		\$420.00

. . Total Bethlehem Expenditures	\$5,485.25
Total Footage	2003
. . Cost per Foot	\$2.738
Bethlehem Cost for MM-75-42	\$2,741.26
Bethlehem Cost for MM-75-43	\$2,743.99

TOTAL EXPENDITURES

Hole No. MM-75-42	\$15,559.63
Hole No. MM-75-43	15,574.75
	<hr/>
Total	\$31,134.38

Folio _____ Statement

May 31 1975

M. Bethlehem Copper Corp. Ltd.

Ashcroft, B.C.

In Acc't With ROBERT CORLEY CONTRACTING

PHONE 457-6427 — BOX 36

CACHE CREEK, B.C.

Terms _____

May 9	Invoice # 29	3 $\frac{1}{2}$ hrs	133.87
May 20	Invoice # 35	5 hrs	191.25
May 28	Invoice # 42	3 $\frac{1}{2}$ hrs	133.88
	Total -		\$459.00

009-857
R.C.
R

ROBERT CORLEY CONTRACTING
PHONE 457-6427 - BOX 36
CACHE CREEK, B. C.

DATE May 9 19 75
M Bethlam Copper Corp Ltd
Ashcroft B.C.
ACCT. FWD.
1
2 Move no 44 Diamond
3 Drill up the hill
4 Maggie Mines
5 Cache Creek B.C.
6
7 125 Michigan Loader
8 (ca) 3825 per hr
9
10
11 Charge acid #9 3 1/2 hrs
12
13 Jon S. Call
14
15 23

ROBERT CORLEY CONTRACTING
PHONE 457-6427 - BOX 36
CACHE CREEK, B. C.

DATE May 20 19 75
M Bethlam Copper Corp Ltd
Ashcroft B.C.
ACCT. FWD.
1 Maggie mines Cache
2 Creek
3 Move Drill down
4 up setting and fill
5 old mine shaft
6
7 125 Michigan Loader
8 (ca) 3825 per hr
9 5 hrs
10
11 Charge acid #9
12
13 Jon S. Call
14
15 37

ROBERT CORLEY CONTRACTING
PHONE 457-6427 - BOX 36
CACHE CREEK, B. C.

DATE May 28 19 75
M Bethlam Copper Corp Ltd
Ashcroft B.C.
ACCT. FWD.
1 Maggie mines Cache
2 Creek
3 Move Drill and
4 set up on the
5 throat hole
6
7 125 Michigan
8 (ca) 3825 per hr
9 3 1/2 hrs
10
11 Jon S. Call
12 Charge acid #9
13
14
15 42

JUN 10 1975 EA ✓

PHONE 372-8835 HGE
REA

A. W. McWILLIAM
D. G. WHYTE
R. J. GOBLE
R. C. DOMINIK
A. DANILUCK
V. STELL
P. W. WHELAN

McWilliam, Whyte, Goble & Associates

British Columbia Land Surveyors

KAMLOOPS - PRINCE GEORGE - SMITHERS

OUR FILE 75-163

SUITE 204
153 SEYMOUR STREET
KAMLOOPS, B.C. V2C 2C7

6 June 1975

Bethlehem Copper Corporation
2100-1055 West Hastings Street
Vancouver 1, B.C.

Attention: Mr. Erik Andersen

Dear Erik,

Re: Maggi Mine - Drill Holes

Further to your letter of May 22, 1975 I herewith
enclose the co-ordinates and elevations of the
subject holes together with our account.

M M - 75-42

Co-ordinates = 503723.3 N
497508.3 E

Elevation = 1839.4

M M - 75-43

Co-ordinates = 503809.6 N
496546.6 E

Elevation = 1930.2

Yours truly

MCWILLIAM, WHYTE, GOBLE & ASSOCIATES


D.G. Whyte

DGW/hd

204 - 153 SEYMOUR STREET
KAMLOOPS, BRITISH COLUMBIA

INVOICE

TELEPHONE: 372-8835

6 JUNE 1975

McWilliam, Whyte, Goble & Associates

BRITISH COLUMBIA LAND SURVEYORS
KAMLOOPS - PRINCE GEORGE - SMITHERS

BETHLEHEM COPPER CORPORATION LTD

SUITE 2100 - 1055 WEST HASTINGS STREET

VANCOUVER 1, British Columbia

A service charge of 1% (\$1.00 min.) per month,
18% per annum, will be charged on statement
balances carried forward from previous month.

OUR JOB # 75-163
YOUR FILE #

RE: DRILL HOLES - MAGGIE MINES

Professional services and expenses\$375.00

9-845

AA

INVOICE

SHEPHERD ENTERPRISES LTD.

804 - 470 Granville Street, Vancouver, B.C. V6C 1V5
Box 21 - 24, Station A, Kamloops, B.C. V2B 7K6

Bethlehem Copper Corporation Ltd.,

Suite 2100 - 1055 W. Hastings St.,

VANCOUVER, B. C.

Invoice No. 0008

Date May 21, 1975

Period Maggie

Property May 1 - 15

FOOTAGE:

Hole #	From	To	Total Footage	Price/Foot	Total
MM 75-42	0	348	348	10.50	3,654.00
<u>Total Drilling Cost:</u>					3,654.00

MOBILIZATION:

Robo Transport - 8-1/2 hrs @ 22.50 per hr	191.25
54 Man Hours @ 9.75 per hr	526.50
Plus 10%	71.75
	71.78
<u>Total Mobilization:</u>	789.53

TOTAL INVOICE: \$ 4,443.53

Per: _____
E. Tessmer, General Manager

Engineering Approval _____

Date _____

*ok for Payment.
107-938
R.E.
K*

INVOICE

SHEPHERD ENTERPRISES LTD.

804 - 470 Granville Street, Vancouver, B.C. V6C 1V5
 Box 21 - 24, Station A, Kamloops, B.C. V2B 7K6

Bethlehem Copper Corp. Ltd.,
 Ste. 2100 - 1055 West Hastings Street,
 VANCOUVER, B. C.
 Period May 16 - 31, 1975
 Property MAGGIE

Invoice No. **0016**

Date May 30/75

FOOTAGE:

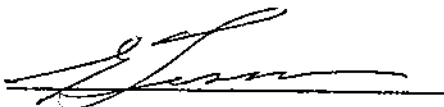
Hole #	From	To	Total Footage	Price/Ft	Total
MM 75-42	348	500	152 ✓	10.50	1,596.00
MM75-43	0	500	500 ✓	10.50	5,250.00
MM 75-43	500	1000	500 ✓	11.50	5,750.00
MM 75-43	1000	1002	2 ✓	12.50	25.00
MM 75-42	500	688	188 ✓	11.50	2,162.00
					<u>14,783.00</u>

MJD:

Used in Overburden; to clean Hole MM75-42:
 51 bags @ \$6.10/bag 311.10

OPERATING FIELD COST:

Moving and Setting Up:	32 man hrs @ \$9.75/hr	312.00
	16 machine hrs @ \$8.50/hr	136.00
One NW Casing Shoe		174.00
One NQ Bit - Clean Out Hole		200.00
Washing Out Hole:	14 man hrs @ \$9.75/hr	136.50
	7 machine hrs @ \$8.50/hr	59.50
		<u>1,018.00</u>
	Plus 10%	101.80
		<u>1,119.80</u>

Per: 
 E. Tessmer, Gen. Mgr.

TOTAL INVOICE: \$ 16,213.90

009-938 ROR. etc. per request. O.K. [Signature]

Engineering Approval _____ Date _____

INVOICE

JUN 10 1975 REX

SHEPHERD ENTERPRISES LTD.

804 - 470 Granville Street, Vancouver, B.C. V6C 1V5
Box 21 - 24, Station A, Kamloops, B.C. V2B 7K6

Bethlehem Copper Corporation
2100 - 1055 West Hastings Street
VANCOUVER, B. C.

Period _____
Property Maggie; Highland Valley

Invoice No. **0022**

Date June 12, 1975

FOOTAGE:

<u>Hole #</u>	<u>From</u>	<u>To</u>	<u>Total Footage</u>	<u>Price/Foot</u>	<u>Total</u>	
MW-75- 82	688	1001	313	\$11.50	<u>\$3,599.50</u>	\$ 3,599.50

MUD:

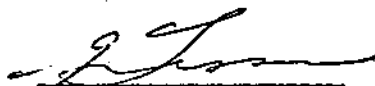
10 Bags @ \$6.10 each 61.00

MOBILIZATION AND DEMOBILIZATION:

Demobilization	-	32 man hours @ \$9.75 per hr	-	312.00		
		Plus 10%		<u>31.20</u>		
				343.20		
Transportation	-	Demob. to Kamloops	-	<u>154.00</u>		
						<u>497.20</u>

CASING LEFT IN HOLES:

Hole B-432:	1	-	5' NW Casing @ \$35.00 each	-	35.00	
	1	-	2' NW Casing @ \$18.75 each	-	18.75	
	1	-	NW Casing Shoe #2157	-	174.50	
Hole B-433:	1	-	5' NW Casing	-	35.00	
	1	-	2' NW Casing	-	18.75	
	1	-	NW Casing Shoe #2238	-	174.50	
Hole B-434:	6	-	2' NW Casing	-	112.50	
	1	-	NW Casing Shoe #3328	-	<u>174.50</u>	
					743.50	
			Less 10%		<u>74.35</u>	
						<u>669.15</u>

PER: 
E. Tessmer, Gen. Mgr.

TOTAL INVOICE

\$4,826.85

Engineering Approval _____

Date _____

SECTION C - STATEMENT OF EMPLOYEE QUALIFICATIONS

DAVID CHARLES MILLER, P.ENG. - Mr. D. C. Miller,

geologist, obtained the degree in Geological Engineering from the University of British Columbia in 1959. Following graduation he was employed by Eldorado Mining and Refining Ltd. and Cominco Ltd. before joining the exploration staff of Bethlehem Copper Corporation in the fall of 1967. His positions with Bethlehem have been as Chief Geologist at the company's Highland Valley operations and Maggie exploration project (1967-73), Senior Exploration Geologist on numerous property examinations and exploration ventures in Canada and the United States (1973 to the present).

RONALD JAMES NETHERY, P.ENG. - Mr. R. J. Nethery,

geologist, obtained the degree of Bachelor of Science from the University of British Columbia in 1967. Mr. Nethery joined the staff of Bethlehem Copper Corporation in the fall of 1967 and was engaged as an exploration geologist working on large scale drilling ventures from 1967 to 1972. From 1972 to the present time he has been assigned to conduct general property examinations in Canada and the United States.

Both these gentlemen have conducted their assignments in a competent and professional manner.



R. E. Anderson, P.Eng.
Exploration Manager

SECTION "D" - DRILL HOLE LOGS

Hole No. MM-75-42

Hole No. MM-75-43

DRILL HOLE LOG

BETHLEHEM COPPER CORPORATION LTD.

SHEET No. 1

Property	MAGGIE MINE	Hole No.	MM-75-42	Bearing	-	Elevation	1839.4'	Logged by	R. J. Nethery and D. C. Miller
District		Length	1001'	Dip	-90°	Overburden	38'	Date	May 14, 1975
Commenced	May 9	May 28	Latitude	503723.3 (136N)	Hor. Comp.	-	Recovery	-	<i>J. Miller</i>
Completed	May 17	June 4	Departure	497508.3 (104E)	Vert. Comp.	1001'	Purpose	MAGGIE MINE AREA EXPLORATION	

DESCRIPTION	SULPHIDES			ALTERATION				STRUCTURE		OTHERS		From	To	Sample No.	%Cu	%Mo	Ag oz/ton	Au oz/ton	% Recovery
	Py: Cp	Bn: Cp	% Py	Ser	Chl.	Ep	K-spar	Faults	Fractures	Qtz Veining	Adific Veins								
Mostly chert and some silicified argillite			> 1%							Weak									95
- rock has been finely brecciated but now completely sealed with generally siliceous material										Weak to Moderate		38	50	1001M	.02	.002	.06		98
										"		50	60	1002M	.02	.002	tr.		98
										"		60	70	1003M	.02	.002	.17	Nil	98
- core very hard and well silicified			> 1%							"		70	80	1004M	.02	.002	.08		95
- pyrite is common on fractures and in blebs										"		80	90	1005M	.02	.003	tr.		98
- some minor chalcopyrite										"		90	100	1006M	.01	.002	.22	Nil	98
- rock dark-matrix dark and silicified			> 1%							"		100	110	1007M	.02	.002	.07		95
fault (119 - 121)								Strong	119) 121)	fault"		110	120	1008M	.02	.002	.09		95

DRILL HOLE LOG

BETHLEHEM COPPER CORPORATION LTD.

SHEET No. 2

Property MAGGIE MINE

Hole No. MM-75-42

Logged by R. J. Nethery

Date May 14, 1975

DESCRIPTION	SULPHIDES			ALTERATION				STRUCTURE		OTHERS		From	To	Sample No.	%Cu	%Mo	Ag oz/ton	Au oz/ton	% Recovery
	Py: Cp	Bn: Cp	% Py	Ser.	Chl.	Ep	K-spar	Faults	Fractures	Qtz. Veining	Aplitic Veins								
Mostly chert with some silicified argillite			>1%					Weak				120	130	1009M	.02	.001	tr.		98
- rock finely brecciated and sealed								"				130	140	1010M	.02	.002	.06		98
- matrix varies from dark brown to greenish brown			.5% - 1%					"				140	150	1011M	.01	.003	.17	Nil	98
- core well silicified								"				150	160	1012M	.01	.001	tr.		98
- pyrite common			1%					"				160	170	1013M	.01	.001	.37	Nil	98
- Mostly well shattered light grey chert - fracture sealed by quartz and soft greyish green material.								"				170	180	1014M	.02	.002	tr.		98
- Core very hard and silicified.			1%					"				180	190	1015M	.02	.002	.11		98
Main fractures 75° and 35° to core axis								"				190	200	1016M	.01	.002	.13		98
(Flow banding in black argillic like rock around fragments of chert.)								"				200	210	1017M	.02	.002	tr.		98
Volcanic agglomerate (229 - 238)			1%					"				210	220	1018M	.02	.002	.25	Nil	98
↓ Andesite (greenish grey) (238 - 242)								Str.				220	230	1019M	.03	.002	.01		98
Chert fragments in silicified black matrix (242 - 254).								"				230	240	1020M	.02	.002	.03		98
												240	250	1021M	.03	.004	.05		98

DRILL HOLE LOG

BETHLEHEM COPPER CORPORATION LTD.

SHEET No. 3

Property MAGGIE MINE Hole No. MM-75-42 Logged by R. J. Nethery and D. C. Miller Date May 14, 1975

DESCRIPTION	SULPHIDES			ALTERATION				STRUCTURE		OTHERS		From	To	Sample No.	%Cu	%Mo	Ag oz/ton	Au oz/ton	% Recovery
	Py: Cp	Bn: Cp	% Py	Ser	Chl.	Ep	K-spar	Faults	Fractures	Qtz. Veining	Aplitic Veins								
Volcanic - light greenish Rock grey			1%	Mod to Str	Str				Weak	15° to axis with pyrite		250	260	1022M	.02	.002	.03		98
considerable distortion and flow fragmentation down to 260' - gives appearance of agglomerate - core relatively soft				"	"				"			260	270	1023M	.02	.002	tr.		98
Andesite (260 - 280) some porphyry				"	"				"			270	280	1024M	.02	.003	.04		98
Volcanic agglomerate - rock has been distorted along sealed shear planes, giving elongated flow texture - major shear direction 10° to core axis			.5 to 1%	"	"				Weak to Mod.			280	290	1025M	.02	.003	tr.		98
in area of broken core 300 - 306; this direction has slickensides				"	"				Mod.			290	300	1026M	.02	.004	tr.		98
Now highly silicified rock containing fragments of chert and argillite (323 - 341)				"	"				Weak			300	310	1027M	.02	.003	.01		98
- main lineation 20 to 25° to axis				"	"				Weak			310	320	1028M	.02	.003	.07		98
Volcanics (341 - 355) (355 - 429) Chert Minor Volcanics			>1%	Mod. Str					"			320	330	1029M	.02	.003	.10		98
Medium - dark grey; fractured and brecciated; minor volcanic sections;			>1%	"	"				"			330	340	1030M	.02	.004	.10		98
3% pyrite; traces of chalcopyrite; local interbanded chert.				Wk. Str					Weak			340	350	1031M	.02	.001	.15		95
				Wk. Mod.					Mod.			350	360	1032M	.02	.001	.05		95
				Wk. Mod.					Mod.			360	370	1033M	.02	.002	.14		95
				Wk. Mod.					Mod.			370	380	1034M	.02	.001	.06		95

DRILL HOLE LOG

BETHLEHEM COPPER CORPORATION LTD.

SHEET No. 4

Property MAGGIE MINE Hole No. MM-75-42 Logged by D. C. Miller Date June 2, 1975

DESCRIPTION	SULPHIDES			ALTERATION				STRUCTURE		OTHERS		From	To	Sample No.	%Cu	%Mo	Ag oz/ton	Au oz/ton	% Recovery
	Py: Cp	Bn: Cp	% Py	Ser.	Chl.	Ep.	K-spar	Faults	Fractures	Qtz. Veining	Aplitic Veins								
(355 - 429) Chert (cont'd) and volcanics at 20° to core axis.			3		Mod.				Mod.			380	390	1035M	.02	.001	tr.		95
(370-374), (376-382) grey green speckled volcanics			3.		Mod.				Mod.			390	400	1036M	.01	.001	.07		95
			3		Mod.				Mod.			400	410	1037M	.02	.001	.12		95
(429 - 441) Volcanics Green-grey speckled volcanic breccia; pyrite mainly on fractures			2		Mod.				Mod.			410	420	1038M	.02	.001	.15		95
			2		Mod.				Mod.			420	430	1039M	.02	.002	.14		95
(441 - 451) Chert Dark to medium grey; brecciated and finely fractured; some interbanded volcanic material; pyrite mainly on fractures.			2		Mod.				Weak			430	440	1040M	.02	.001	.16		95
			2		Mod.				Mod.			440	450	1041M	.02	.002	.15		95
			2		Mod.				Weak			450	460	1042M	.02	.001	.18	Nil	95
			1		Mod.				Weak			460	470	1043M	.02	.001	tr.		95
			1		Mod.				Weak			470	480	1044M	.02	.001	tr.		95
			1		Mod.				Weak			480	490	1045M	.02	.001	.01		95
			1		Mod.				Weak			490	500	1046M	.04	.001	tr.		95
			1		Mod.			503-510	Weak			500	510	1117M	.03	.001			70

DRILL HOLE LOG

BETHLEHEM COPPER CORPORATION LTD.

SHEET No. 5

Property MAGGIE MINE

Hole No. MM-75-42

Logged by D. C. Miller

Date June 2, 1975

DESCRIPTION	SULPHIDES			ALTERATION				STRUCTURE		OTHERS		From	To	Sample No.	%Cu	%Mo	Ag oz/ton	Au oz/ton	% Recovery
	Py: Cp	Bn: Cp	% Py	Ser.	Chl.	Ep	K-spar	Faults	Fractures	Qtz. Veining	Aplitic Veins								
(451 -) Volcanics: (Basalt-Andesite)			1		Wk.				Wk.			510	520	1118M	.02	.002			90
Green-grey speckled, mainly agglomerate with sub-rounded fragments ranging from 5 mm to >5 cm;			1/2		Wk.				Wk.			520	530	1119M	.02	.001			95
approx. 1% pyrite as fine grain blebs and occasional veinlets to 2 mm wide			1/2		Wk.				Wk.			530	540	1120M	.02	.001			95
occasional calcite veinlet to 5 mm width; fractures mainly 45-70°			1/2		Wk.				Wk.			540	550	1121M	.02	.001			95
(537 - 547) Massive dark grey volcanic, possibly a dyke.			1/2		Wk.				Wk.			550	560	1122M	.02	.001			95
(555 - 580) Some finer-grained tuff sections; local banding at 60° to core axis.			1		Wk.				Wk.			560	570	1123M	.02	.002			80
(603 - 693) Mainly fine grain, fairly uniform dark grey-green volcanic; speckled with fine mafic clots; occasional chlorite-calcite-pyrite filled amygdale near 690 ft.; core tends to break in pieces < 6" long.			1		Wk.				Wk.			570	580	1124M	.02	.004			95
			1		Wk.				Mod.			580	590	1125M	.02	.001			80
			1		Wk.				Wk.			590	600	1126M	.03	.001			95
			1/2		Wk.				Wk.			600	610	1127M	.02	.001			95
			1/2		Wk.				Wk.			610	620	1128M	.02	.001			95
			1/2		Wk.				Wk.			620	630	1129M	.02	.001			95
			1/2		Wk.				Wk.			630	640	1130M	.01	.001			85

DRILL HOLE LOG

BETHLEHEM COPPER CORPORATION LTD.

SHEET No.6

Property MAGGIE MINE

Hole No. MM-75-42

Logged by D. C. Miller

Date. June 2, 1975

DESCRIPTION	SULPHIDES			ALTERATION				STRUCTURE		OTHERS		From	To	Sample No.	%Cu	%Mo	Ag oz/ton	Au oz/ton	% Recovery
	Py. Cp	Br. Cp	% Py	Ser.	Chl.	Ep	K-spar	Faults	Fractures	Qtz. Veining	Aplitic Veins								
Volcanics (cont'd)			1		Wk.				Wk.			640	650	1131M	.02	.001			95
(680 - 693) Calcite veining increasing.			1		Wk.				Wk.			650	660	1132M	.01	.001			95
(693 - 793) - Agglomerate, breccia, strong calcite veining as erratic discontinuous patches and veins (15% white calcite); very sparse pyrite.			1		Wk.				Mod.			660	670	1133M	.02	.001			95
			1		Wk.				Mod.			670	680	1134M	.01	.001			95
			1		Wk.				Mod.			680	690	1135M	.01	.002			95
			1/2		Wk.				Wk.			690	700	1136M	.02	.001			95
			Tr		Wk.				Wk.			700	710	1137M	.02	.001			95
			Tr		Wk.				Wk.			710	720	1138M	.01	.001			95
			Tr		Wk.				Wk.			720	730	1139M	.01	.001			95
			Tr		Wk.				Wk.			730	740	1140M	.02	.001			95
			1/2		Wk.				Wk.			740	750	1141M	.01	.001			95
			1/2		Wk.				Wk.			750	760	1142M	.02	.001			95
			1/2		Wk.				Wk.			760	770	1143M	.01	.001			95

DRILL HOLE LOG

BETHLEHEM COPPER CORPORATION LTD.

SHEET No. 7

Property MAGGIE MINE

Hole No. MM-75-42

Logged by D. C. Miller

Date June 2, 1975

DESCRIPTION	SULPHIDES			ALTERATION				STRUCTURE		OTHERS		From	To	Sample No.	%Cu	%Mo	Ag oz/ton	Au oz/ton	% Recovery
	Py: Cp	Bn: Cp	% Py	Ser.	Chl.	Ep	K-spar	Faults	Fractures	Qtz. Veining	Aplitic Veins								
Volcanics (cont'd)			½		Wk.				Wk.			770	780	1144M	.01	.001			95
(693 - 793) Mainly grey-green volcanic breccia; 15% white calcite veining; fractures mainly at 15-45°.			½		Wk.				Wk.			780	790	1145M	.01	.001			95
			½		Wk.				Wk.			790	800	1146M	.01	.001			95
			Tr		Wk.				Wk.			800	810	1147M	.01	.001			95
(793 - 1001) Mainly grey-green fine grain speckled volcanics; 5-10% calcite veining; contact at 793' at 60°			Tr		Wk.				Wk.			810	820	1148M	.02	.001			95
to core axis; local 45° banding; hard brittle core; less than 1% pyrite mainly associated with very fine discontinuous fractures.			Tr-½		Wk.				Wk.			820	830	1149M	.02	.001			95
			"		Wk.				Wk.			830	840	1150M	.02	.001			95
			"		Wk.				Wk.			840	850	1151M	.02	.001			95
			"		Wk.				Wk.			850	860	1152M	.02	.001			95
			"		Wk.				Wk.			860	870	1153M	.02	.001			95
			"		Wk.				Wk.			870	880	1154M	.02	.001			95
			"		Wk.				Wk.			880	890	1155M	.02	.001			95
			"		Wk.				Wk.			890	900	1156M	.02	.001			95

DRILL HOLE LOG

BETHLEHEM COPPER CORPORATION LTD.

SHEET No. 8

Property MAGGIE MINE

Hole No. MM-75-42

Logged by D. C. Miller

Date June 13, 1975

DESCRIPTION	SULPHIDES			ALTERATION				STRUCTURE		OTHERS		From	To	Sample No.	%Cu	%Mo	Ag oz/ton	Au oz/ton	% Recovery
	Py: Cp	Bn: Cp	% Py	Ser.	Chl.	Ep.	K-spar	Faults	Fractures	Qz. Vening	Aplitic Veins								
Volcanics (cont'd) Minor chalcocpyrite at 906'			Tr		Wk.				Wk.			900	910	1157M	.01	.002			95
916' 5" with strong pyrite, calcite and some sphalerite			½		Wk.				Wk.			910	920	1158M	.02	.002			95
(934 - 951) } Broken core			Tr		Wk.			920'	Mod.			920	930	1159M	.02	.002			95
(986 - 1001) }			Tr		Wk.				Wk.			930	940	1160M	.02	.002			95
(900 - 1001) 5% white calcite healing small discontinuous fracture clusters			Tr		Wk.				Mod.			940	950	1161M	.02	.001			95
920' 4" fault gouge			Tr		Wk.				Mod.			950	960	1162M	.01	.001			90
(937 - 982) Many small curving fractures at various angles giving brecciated appearance.			Tr		Wk.				Mod.			960	970	1163M	.01	.001			90
			Tr		Wk.				Mod.			970	980	1164M	.01	.001			95
			Tr		Wk.				Wk.			980	990	1165M	.02	.001			95
1001' End of Hole			Tr		Wk.				Wk.			990	1001	1166M	.02	.001			95

DRILL HOLE LOG

BETHLEHEM COPPER CORPORATION LTD.

SHEET No. 1

Property	MAGGIE MINE	Hole No.	MM-75-43	Bearing	-	Elevation	1930.2'	Logged by	D. C. Miller
District		Length	1002'	Dip	-90°	Overburden	305'	Date	June 2, 1975
Commenced	May 20, 1975	Latitude	503809.6N (140N)	Hor. Comp.	-	Recovery	-	<i>D. C. Miller</i>	
Completed	May 27, 1975	Departure	496546.6 (96E)	Vert. Comp.	1002'	Purpose	EXPLORE MAGGIE SHAFT AREA		

DESCRIPTION	SULPHIDES			ALTERATION				STRUCTURE		OTHERS		From	To	Sample No.	%Cu	%Mo	Ag oz/ton	Au oz/ton	% Recovery
	Py: Cp	Bn: Cp	% Py	Ser	Chl	Ep	K-spr	Faults	Fractures	Qtz Veining	Aplitic Veins								
(305 - 420) <u>Fine Grain Porphyry</u>																			
Pale grey; comprises 10-30%																			
fine grain glassy to whitish feldspar phenocrysts and minor quartz crystals and sparse sericitized fine grain mafics in a pale grey aphanitic matrix; 2-3% fine grain disseminated pyrite; minor fine pyrite veinlets; trace chalcopyrite; some fine grain brown biotite; minor black sphalerite associated with pyrite veinlets			3%	Wk.						Wk.			305	310	1047M	.02	.002		80
(±) quartz; very minor calcite veinlets; stronger fractures at 15-45° ±			3%	Wk.						Wk.			310	320	1048M	.02	.002		95
			3%	Wk.						Wk.			320	330	1049M	.02	.001		95
			3%	Wk.						Wk.			330	340	1050M	.02	.002		95
			3%	Wk.						Wk.			340	350	1051M	.02	.002		95
			3%	Wk.						Wk.			350	360	1052M	.02	.002		95
			3%	Wk.						Wk.			360	370	1053M	.03	.002		95
			3%	Wk.						Wk.			370	380	1054M	.03	.001		95

DRILL HOLE LOG

BETHLEHEM COPPER CORPORATION LTD.

SHEET No. 2

Property MAGGIE MINE

Hole No. MM-75-43

Logged by D. C. Miller

Date June 2, 1975

DESCRIPTION	SULPHIDES			ALTERATION				STRUCTURE		OTHERS		From	To	Sample No.	%Cu	%Mo	Ag oz/ton	Au oz/ton	% Recovery
	Py: Cp	Bn: Cp	% Py	Ser.	Chl.	Ep.	K-spar	Faults	Fractures	Qtz. Veining	Aplitic Veins								
(305 - 420) Fine Grain Porphyry (cont'd)			3	Wk.					Wk.			380	390	1055M	.03	.001			95
(420 - 422) Contact zone between intrusive and chert-argillite sequence; broken core; 3" of chalcopyrite-sphalerite-calcite-quartz veining at 10-20° to core axis at 420'.			3	Wk.					Wk.			390	400	1056M	.03	.002			95
			3	Wk.					Wk.			400	410	1057M	.05	.002			95
			3	Wk.					Wk.			410	420	1058M	.16	.001			95
(422 - 514) Chert and Argillite			2	Wk.					Wk.			420	430	1059M	.03	.001			95
			2	Wk.					Wk.			430	440	1060M	.02	.001			95
Pale grey; about 90% hard cherty rock with 10% bands of softer material; banding at 5-20° to core axis; 2% pyrite along very fine fractures; occasional quartz vein to 5 mm in width; traces of sphalerite and chalcopyrite			2	Wk.					Wk.			440	450	1061M	.02	.001			95
			2	Wk.					Wk.			450	460	1062M	.03	.001			95
			2	Wk.					Wk.			460	470	1063M	.02	.001			95
			2	Wk.					Wk.			470	480	1064M	.01	.001			95
			2	Wk.					Wk.			480	490	1065M	.02	.001			95
			2	Wk.					Wk.			490	500	1066M	.02	.001			95
			2	Wk.					Wk.			500	510	1067M	.02	.001			95

DRILL HOLE LOG

BETHLEHEM COPPER CORPORATION LTD.

SHEET No. 4

Property MAGGIE MINE

Hole No. MM-75-43

Logged by D. C. Miller

Date June 3, 1975

DESCRIPTION	SULPHIDES			ALTERATION				STRUCTURE		OTHERS		From	To	Sample No.	%Cu	%Mo	Ag oz/ton	Au oz/ton	% Recovery
	Py: Cp	Bn: Cp	% Py	Ser.	Chl.	Ep.	K-spar	Faults	Fractures	Qtz. Veining	Aplitic Veins								
(596 - 1002) Peridotite (cont'd)			1									640	650	1081M	.01	.001			80
(596 - 640) Pale green-grey; soft; weak foliation at 20-30°.			1		"							650	660	1082M	.01	.002			90
(640 - 690) Medium green-grey; moderately hard; foliation at 20-40°.			1		"							660	670	1083M	.01	.001			95
(690 - 711) Medium-dark green; some unaltered sections.			1		"							670	680	1084M	.01	.002			95
(711 - 725) Pale grey; soft.			Tr		"							680	690	1085M	.01	.002			95
(725 - 790) Medium-dark green; locally hard with weak serpentine alteration.			Tr		"							690	700	1086M	.01	.002			90
			Tr		"							700	710	1087M	.01	.002			95
			2		"							710	720	1088M	.04	.001			95
			1		"							720	730	1089M	.02	.001			95
			Tr		"							730	740	1090M	.01	.002			95
			Tr		"							740	750	1091M	.01	.001			90
			Tr		"							750	760	1092M	.01	.002			90
			1		"							760	770	1093M	.01	.002			80

DRILL HOLE LOG

BETHLEHEM COPPER CORPORATION LTD.

SHEET No. 5

Property MAGGIE MINE

Hole No. MM-75-43

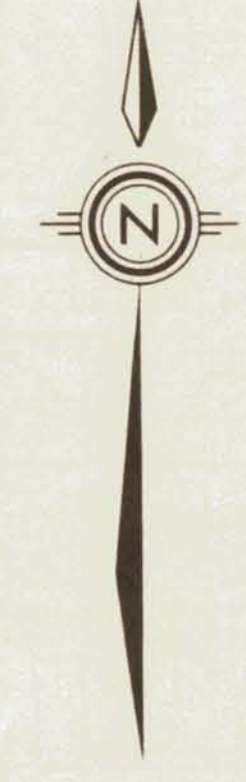
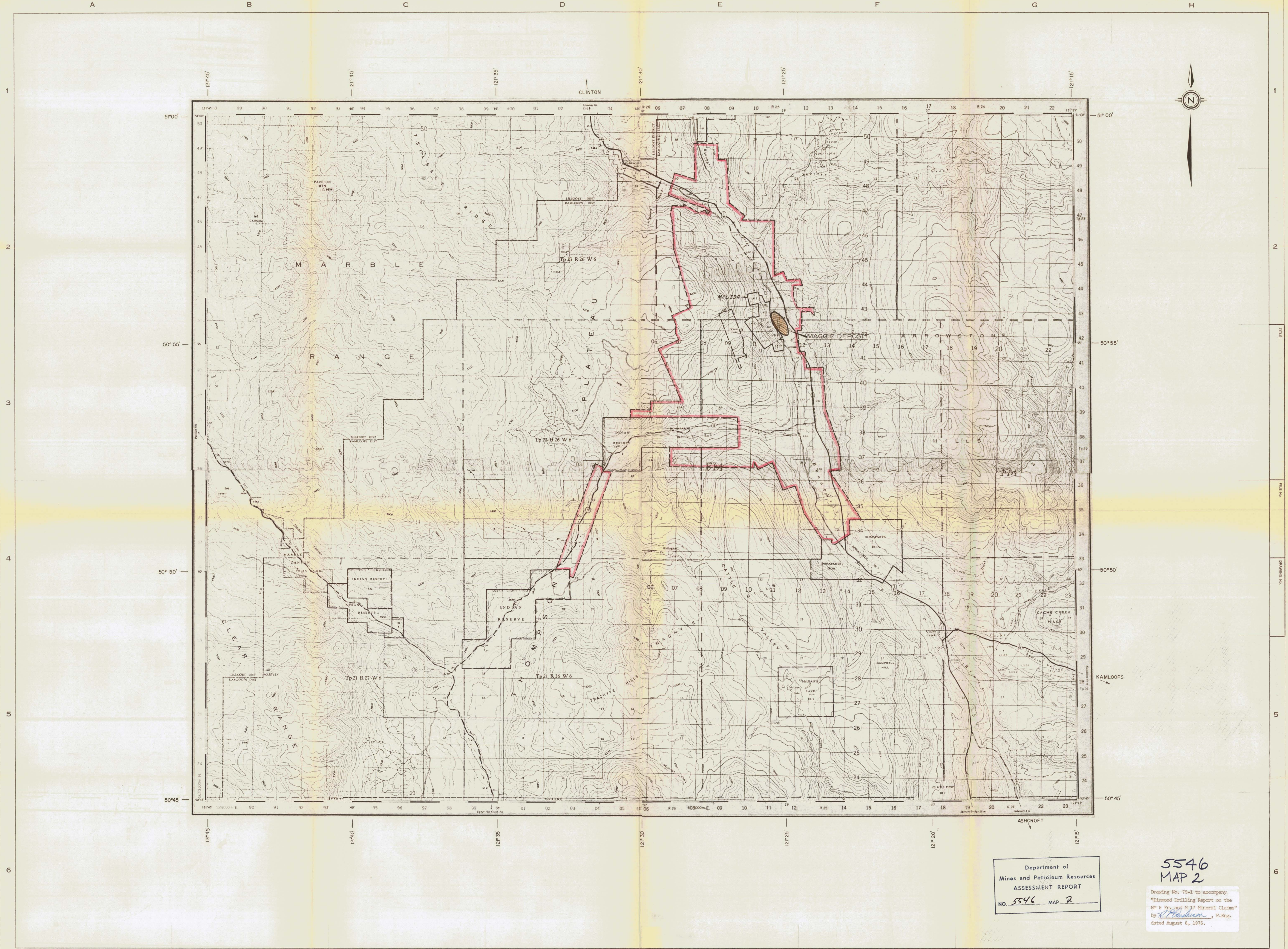
Logged by D. C. Miller

Date June 3, 1975

DESCRIPTION	SULPHIDES			ALTERATION				STRUCTURE		OTHERS		From	To	Sample No.	%Cu	%Mo	Ag oz/ton	Au oz/ton	% Recovery
	Py. Cp	Bn. Cp	% Py	Ser.	Chi.	Ep.	K-spar	Faults	Fractures	Qtz. Veining	Aplitic Veins								
(596 - 1002) Peridotite (cont'd)			1				Talc-Serpentine		Mod.			770	780	1094M	.01	.002			80
(790 - 797) Pale grey; soft			1				"		Mod.			780	790	1095M	tr.	.001			80
(797 - 817) Medium green; strong serpentine			1				"		Mod.			790	800	1096M	.01	.001			95
(817 - 820) Weakly altered			1				"		Mod.			800	810	1097M	.01	.001			95
(820 - 851) Medium green, strong serpentine			Tr				"		Mod.			810	820	1098M	tr.	.001			90
(851 - 861) Pale grey; soft			Tr				"		Mod.			820	830	1099M	tr.	.001			95
(861 - 1002) Medium green; strong serpentine; foliation at 40-60°; strong fractures at 15° + to core axis.			Tr				"		Mod.			830	840	1100M	tr.	.001			95
			Tr				"		Mod.			840	850	1101M	tr.	.001			90
			2				"		Mod.			850	860	1102M	.01	.001			95
			Tr				"		Mod.			860	870	1103M	.02	.001			95
			Tr				"		Mod.			870	880	1104M	tr.	.001			95
			Tr				"		Mod.			880	890	1105M	.01	.001			95
			Tr				"		Mod.			890	900	1106M	tr.	.001			95

SECTION "E" - ILLUSTRATIONS

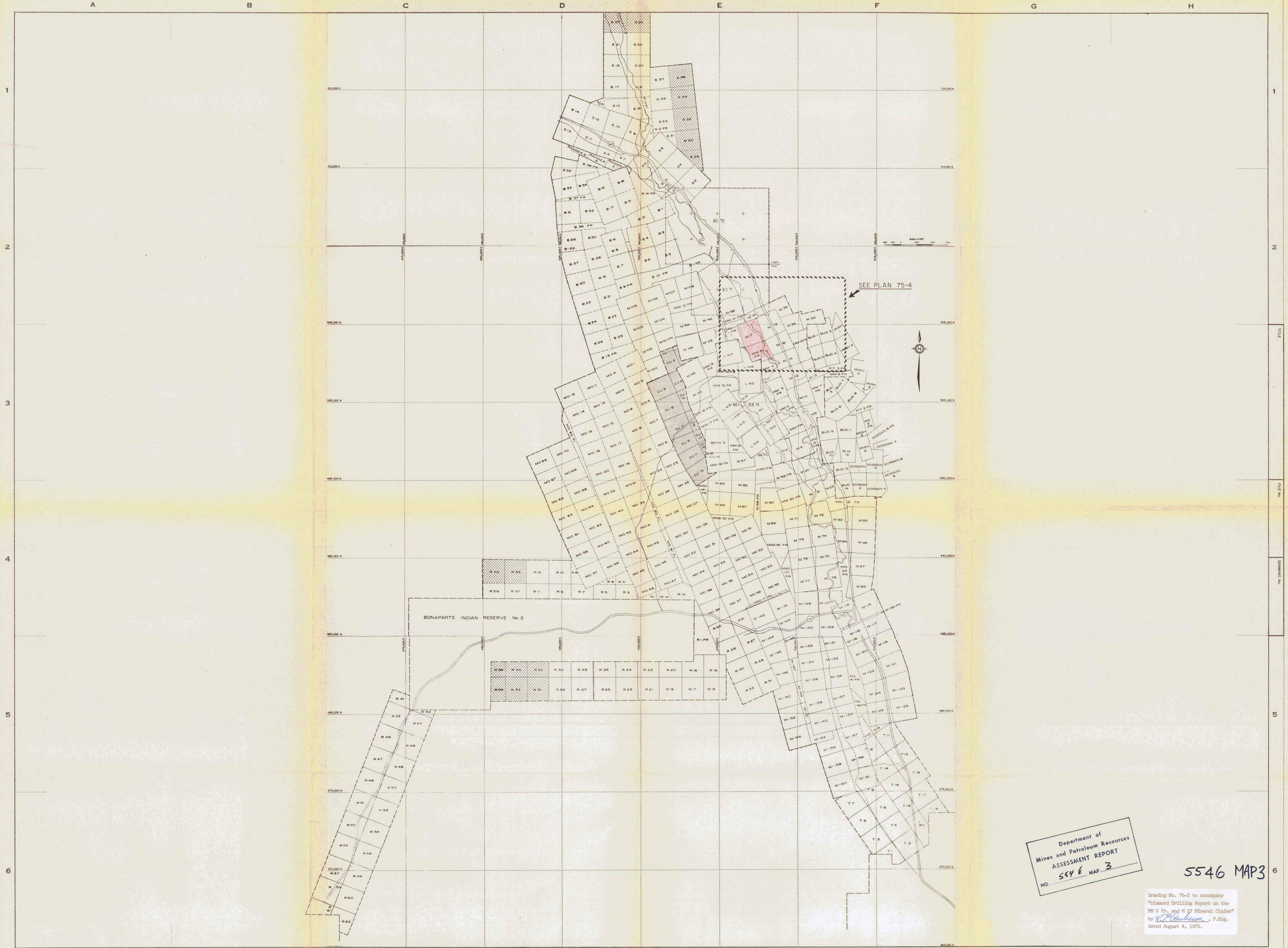
<u>Description</u>	<u>Drawing No.</u>
General Location Map - Scale 1:50,000	75-1
Mineral Claim Map - Scale 1:24,000 or 1" = 2000'	75-2
Aerial Photo Mosaic showing 1975 Drill Hole Locations - Scale 1:12,000 or 1" = 1000'	75-3
Drill Hole Plan - Scale 1:2400 or 1" = 200'	75-4



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 5546 MAP 2

5546
MAP 2
Drawing No. 75-1 to accompany
"Diamond Drilling Report on the
1945 Dr. and M. 27 Mineral Claims"
by *P. Blodgett*, P. Eng.
dated August 8, 1975.

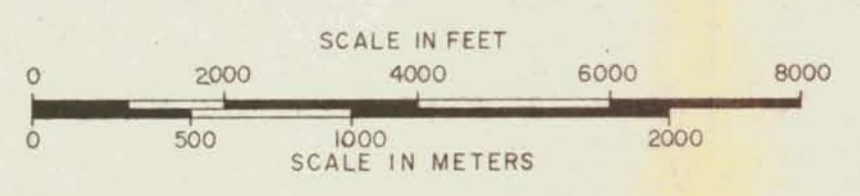
<p>DATE REVISED JUNE / 1975</p>		<p>BY m. a.</p>		<p>DEPT. - EXPLORATION DRAWN BY - CHECKED - E. A. APPROVED - DATE - AUG. 1973 SCALE - 1:50,000</p>			<p>TITLE - MAGGIE MINE PROJECT GENERAL LOCATION MAP</p>	
<p>SCALE 1:50,000 Mile 1 0 2 3 Kilometers 1 0 2 3 4</p>		<p>FILE NUMBER - NTS. 921/13E & 921/14W</p>		<p>DRAWING NUMBER - 75-1</p>				



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 554 E MAP 3

5546 MAP3

Drawing No. 75-2 to accompany
"Diamond Drilling Report on the
M 5 Fr. and M 17 Mineral Claims"
by *[Signature]*, P.Eng.
dated August 8, 1975.



DATE REVISED	BY	DEPT. - EXPLORATION
		DRAWN BY - Altair / m
		CHECKED - E A
		APPROVED -
		DATE - APR 1975
		SCALE - 1:24,000 or 1" = 2000'



TITLE - MAGGIE MINE PROJECT MINERAL CLAIMS MAP	
FILE NUMBER -	DRAWING NUMBER -
	75-2

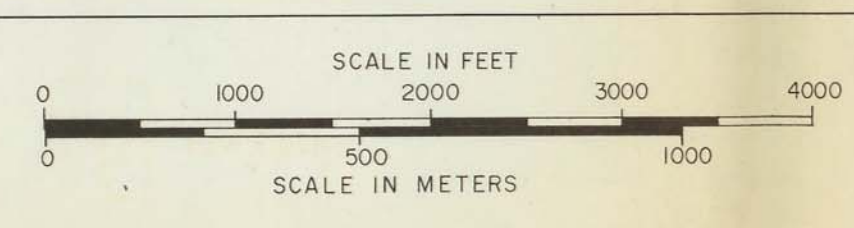


Drawing No. 75-3 to accompany
 "Diamond Drilling Report on the
 MM 5 FF, and M 17 Mineral Claims"
 by *R. P. Mallick*, P.Eng.
 dated August 8, 1975.

5546 MAP 4.

Date of photography 19 June 1972
 Lockwood Survey Corporation Limited
 Vancouver, British Columbia

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 5546 MAP 4



SHEET No 2

1
2
3

DATE	REVISED	BY	DEPT. - EXPLORATION
			DRAWN BY - Allgit / m.k.
			CHECKED - E. A.
			APPROVED -
			DATE - JULY / 1975
			SCALE - 1:12,000 OR 1" = 1000'



TITLE - MAGGIE MINE PROJECT 1975 DRILL HOLE LOCATIONS	
FILE NUMBER -	DRAWING NUMBER -
	75-3

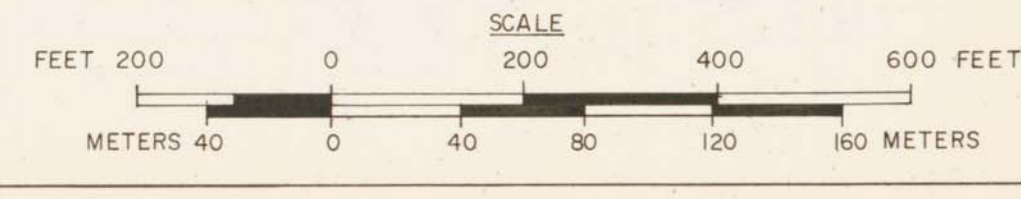


Drawing No. 75-4 to accompany
 "Diamond Drilling Report on the
 M 5 Fr. and M 17 Mineral Claims"
 by *A. P. Plummer*, P. Eng.
 dated August 8, 1975.

5546 MAP 5

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 5546 MAP 5

△ — DIAMOND DRILL HOLE LOCATION
 ○4955 — SURVEY STATIONS



SHEET INDEX —

9	10	11	12	13	14
G					
H					
I					
J					

DATE	REVISED	BY

Bethlehem Copper
 VANCOUVER BRITISH COLUMBIA

TITLE — MAGGIE MINE PROJECT DRILL HOLE PLAN	
FILE NUMBER —	DRAWING NUMBER —
TOPOGRAPHIC SHEET NO. N-13	75-4

Lockwood Survey Corporation Limited
 DATE OF PHOTOGRAPHY: 15 JUNE 1973